envision other modifications within the scope and spirit of the claims appended hereto. Other elements, steps, methods and techniques that are insubstantially different from those described above and/or in the appended claims are also intended to be within the scope of the disclosure.

[1302] The embodiments shown in drawings are presented only to demonstrate certain examples of the disclosure. The drawings described are only illustrative and are non-limiting. In the drawings, for illustrative purposes, the size of some of the elements may be exaggerated and not drawn to a particular scale. Additionally, elements shown within the drawings that have the same numbers may be identical elements or may be similar elements, depending on the context. It should also be noted that all therapies, drug library entries, etc. and their associated parameter values are simply hypothetical and given for example only.

[1303] Where the term "comprising" is used in the present description and claims, it does not exclude other elements or steps. Where an indefinite or definite article is used when referring to a singular noun, e.g. "a" "an" or "the", this includes a plural of that noun unless something otherwise is specifically stated. Hence, the term "comprising" should not be interpreted as being restricted to the items listed thereafter; it does not exclude other elements or steps, and so the scope of the expression "a device comprising items A and B" should not be limited to devices consisting only of components A and B. This expression signifies that, with respect to the present invention, the only relevant components of the device are A and B.

[1304] Furthermore, the terms "first", "second", "third" and the like, whether used in the description or in the claims, are provided for distinguishing between similar elements and other demonstrative purposes. These terms are not necessarily for describing a sequential or chronological order. It is to be understood that the terms so used are interchangeable under appropriate circumstances (unless clearly and unequivocally disclosed otherwise) and that the embodiments of the invention described herein are capable of operation in other sequences and/or arrangements than are described or illustrated herein.

What is claimed is:

1. A system for monitoring and controlling medical devices, the system comprising:

a medical pump configured to infuse a patient with a fluid, the medical pump configured to generate a plurality of continuous quality improvement messages;

a continuous quality manager configured to receive at least one continuous quality improvement message;

an integration component configured to an interface to at least one server; and

a facility gateway configured to communicate over a network, the facility gateway comprising:

a device gateway configured to download a drug library file and disseminate the drug library file over the network,

a device manager configured to register the medical pump and download the drug library file into the medical pump, and

an continuous quality improvement listener configured to receive the plurality of continuous quality improvement messages generated by the medical pump.

2. The system according to claim **1**, wherein the continuous quality improvement listener is configured to communicate the plurality of continuous quality improvement messages to the continuous quality manager.

3. The system according to claim **1**, further comprising a database, wherein the continuous quality improvement listener is configured to store the received plurality of continuous quality improvement messages in the database.

4. The system according to claim **2**, wherein the facility gateway is further configured to reformat a continuous quality improvement message from the medical pump into a formatted continuous quality improvement message.

5. The system according to claim **1**, wherein the continues quality improvement listener is configured to register at least one topic of a publish-subscribe engine to receive the plurality of continuous quality improvement messages.

6. The system according to claim **1**, wherein the facility gateway is configured to communicate at least one CQI message to an electronic medical records system for auto-documentation.

7. The system according to claim **6**, wherein the electronic medical records system is accessible via the integration component by the facility gateway.

8. The system according to claim **1**, wherein the facility gateway is configured to communicate at least one CQI message to a hospital information system to generate at least one bill.

9. The system according to claim **8**, wherein the hospital information system is accessible via the integration component by the facility gateway.

10. The system according to claim **1**, wherein the integration component includes an integration engine.

11. The system according to claim **1**, wherein the integration component is an integration application programming interface.

12. The system according to claim **11**, wherein the integration application programming interface is configured for providing interoperability between the facility gateway and at least one of Patient Information System, an Electronic Medical Records system, an Computerized Physician Order Entry system, an Laboratory Information System, and a Real-Time Location Services system.

13. The system according to claim **11**, wherein the integration application programming interface is configured to isolate at least one application within the facility gateway from at least one facility application.

14. The system according to claim **11**, wherein the integration application programming interface is configured to query data from at least one facility application and reformat the queried data into a standardized format for communication to the medical pump.

15. The system according to claim **14**, wherein the query is a prescription order.

16. The system according to claim **11**, wherein the integration application programming interface is configured to map between dialects of an HL7 standard.

17. The system according to claim **1**, wherein the device gateway is configured to provide a CQI-message routing engine.

18. The system according to claim **1**, wherein the device gateway is configured to provide name resolution.

19. The system according to claim **1**, wherein the device gateway is configured to provide a capability registry.

20. The system according to claim **1**, wherein the integration component is disposed within the facility gateway.